AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

Claims 1 - 46 (Cancelled).

47. (Currently amended) An electron-beam device having an optical axis, comprising:

a beam generator that generates an electron beam;

an objective lens that focuses the electron beam on an object to be examined;

a first detector ~~and a second detector, the first detector and the second detector detecting at least one of: electrons scattered on the object and~~ that detects electrons emitted by the object, said first detector being positioned object-side along the optical axis;[[,]] ~~and said second detector being positioned generator-side along the optical axis;~~

a second detector that detects electrons scattered on the object, the second detector being positioned generator-side along the optical axis; and

at least one opposing field grid which is allocated to the second detector, wherein a voltage is applied to the opposing field grid such that a portion of the electrons emitted by the object and having passed the first detector is not detected by the second detector.

48. (Previously presented) The electron-beam device as recited in Claim 47, further comprising scanning means for directing the electron beam toward the object.

49. (Previously presented) The electron-beam device as recited in Claim 48, wherein the scanning means includes at least two scanning elements per plane.

50. (Previously presented) The electron-beam device as recited in Claim 47, wherein the opposing field grid and the second detector are positioned extra-axially to the optical axis.

51. (Previously presented) The electron-beam device as recited in Claim 47, further comprising at least one deflection device having at least one deflector for directing the electron beam from and toward the optical axis.

52. (Previously presented) The electron-beam device as recited in Claim 51, wherein the deflector is a magnetic unit.

53. (Previously presented) The electron-beam device as recited in Claim 51, wherein the deflector is arranged in the electron-beam device in a region between the object and the beam generator.

54. (Previously presented) The electron-beam device as recited in Claim 51, wherein the deflection device includes a first deflector that directs the electron beam out of the optical axis and a second deflector that directs the electron beam into the optical axis.

55. (Previously presented) The electron-beam device as recited in Claim 51, wherein the deflection device includes a first deflector that directs the electron beam out of the optical axis, a second deflector that steers the electron beam toward the optical axis, and a third deflector that directs the electron beam into the optical axis.

56. (Previously presented) The electron-beam device as recited in Claim 47, wherein the detector includes at least two detection regions.

57. (Previously presented) The electron-beam device as recited in Claim 47, wherein each detector includes least one opposing field grid.

58. (Previously presented) The electron-beam device as recited in Claim 47, further comprising an electron energy controlling device that accelerates and slows down the electrons of the electron beam to specified energies and also maintains the energy after acceleration.

59. (Previously presented) The electron-beam device as recited in Claim 47, wherein the second detector detects electrons backscattered on the object.

60. (Currently amended) A method of detecting electrons, comprising:

generating an electron beam;

focusing the electron beam on an object to be examined;

detecting electrons ~~scattered on the object or~~ emitted by the object using a first detector ~~and a second detector~~, the first detector being positioned object-side along [[the]] an optical axis [[and]];

detecting electrons scattered on the object using [[the]] a second detector, the second detector being positioned generator-side along [[an]] the optical axis;

selecting a portion of the electrons according to electron energy, wherein said selecting includes using a diaphragm, the diaphragm including at least one opposing field grid, and wherein said selecting includes applying a voltage to the opposing field grid such that a portion of the electrons emitted by the object and having passed the first detector is not detected by the second detector.

61. (Previously presented) The method of claim 60, wherein said portion of the electrons selected according to electron energy are backscattered electrons.

62. (Previously presented) The method of claim 60, wherein said portion of the electrons selected according to electron energy are secondary electrons.

63. (Currently amended) The method of claim 60, further comprising directing the electron beam from and toward [[an]] the optical axis.

64. (Previously presented) The method of claim 60, wherein said selecting is performed according to phase space of said portion of the elections.

65. (New) A method of detecting electrons for rendering an image of an object to be examined, the image having enhanced material contrast, the method comprising:

generating an electron beam;

focusing the electron beam on the object to be examined;

detecting electrons emitted by the object or scattered on the object using a detector;

selecting a portion of the electrons according to electron energy using at least one opposing field grid, wherein said selecting includes applying a voltage to the at least one opposing field grid such that electrons scattered on the object strike the detector and such that electrons emitted by the object do not strike the detector;

rendering an image using the detector, the image showing enhanced material contrast.

66. (New) An electron-beam device having an optical axis, comprising:

a beam generator that generates an electron beam;

an anode to which an anode potential is applied and by which electrons of the electron beam generated by the beam generator are accelerated to the anode potential;

a beam guiding tube which is on the anode potential and in which the energy of the electrons is maintained;

an objective lens that focuses the electron beam on a specimen;

an electrode which together with the specimen is on a potential that is lower in relation to the potential of the beam guiding tube so that the electrons in the electron beam are slowed down to a desired low energy shortly before striking the specimen;

at least one detector positioned along the optical axis within the beam guiding tube and detecting at least one of: electrons scattered on the specimen and electrons emitted by the specimen; and

at least one opposing field grid which is allocated at the at least one detector, wherein a voltage is applied to the opposing field grid such that only electrons scattered on the specimen are detected by the at least one detector.